

ABSTRACT

A novel method and apparatus for controlling forward link power when an intergenerational soft handoff is performed in CDMA communication system is disclosed. The forward link power control method and apparatus of the present invention determines acceptable forward link power levels for a selected target base station during intergenerational soft handoff (ISHO) procedures. The method and apparatus of the present invention controls the forward link power for the selected target base station during an ISHO procedure. Open loop and slow forward power control embodiments of the present invention rely upon an observation that information regarding a mobile station serving forward traffic channel can be communicated to the selected target base station using an MSC. In another embodiment, a statistical value can be used to determine a forward link transmit power of a selected target base station. The RTC demodulation embodiment controls forward link transmit power of a target base station by directly demodulating an RTC or FPCC of a mobile station and obtaining power control commands. The method and apparatus of the present invention improves the performance, increases the Quality of Service (QoS), and improves the capacity of CDMA communication systems during complete intergenerational handoff procedures.